

Supplementary Table 1. Patient characteristics for machine learning development and external validation

Characteristic	Model development (n=184)	External validation (n=72)	P
Age (yr)	69±13	72±13	0.11
Male sex	105 (57)	35 (49)	0.23
Hypertension	118 (64)	50 (69)	0.29
Diabetes mellitus	45 (24)	22 (31)	0.30
Dyslipidemia	40 (22)	28 (39)	0.02
Atrial fibrillation	93 (51)	35 (49)	0.88
TOAST classification			
Large artery atherosclerosis	45 (24)	13 (18)	-
Cardioembolism	107 (58)	42 (58)	-
Other determined etiology	13 (7)	10 (14)	-
Undetermined etiology	19 (10)	7 (10)	-
NIHSS score at baseline	10 (6–17)	14 (9–18)	0.06
Last known well to MRI time (min)	111 (72–235)	154 (100–320)	0.23
Pre-treatment diffusion lesion volume (mL)	14 (5–33)	24 (12–55)	0.02
EVT, number	143	54	-
EVT, mTICI=0–2a	48 (34)	7 (13)	-
EVT, mTICI=2b–3	95 (66)	47 (87)	-
No EVT, number	41	18	-

Values are presented as mean±standard deviation, number (%), or median (interquartile range).

TOAST, Trial of Org 10172 in Acute Stroke Treatment; NIHSS, National Institutes of Health Stroke Scale; MRI, magnetic resonance imaging; EVT, endovascular thrombectomy; mTICI, modified treatment in cerebral infarction.

Supplementary Table 2. Diffusion-weighted imaging scan parameters across multiple institutions

Field strength	SMC (n=126)		KUGH (n=76)		UCLA (n=54)	
	3T	1.5T	3T	3T	1.5T	3T
Manufacturer	Philips Achieva	Siemens Avanto	Siemens Trio	Siemens Prisma	Siemens Avanto	Siemens Trio
Repetition time (sec)	3.0	3.7	3.8	3.5	4.1	4.3
Echo time (ms)	81–88	82	91	69	89	78
No. of slices	22	20–22	20	22	26	26
Image matrix size	256×256	192×192	384×384	250×250	130×130	256×256
Pixel spacing (mm ²)	0.94×0.94	1.20×1.20	0.60×0.60	0.96×0.96	1.69×1.69	0.86×0.86
Spacing between slices (mm)	6.5	8	7.5	7	6	6
b-Values (s/mm ²)	0, 1,000	0, 1,000	0, 1,000	0, 1,000	0, 500, 1,000	0, 500, 1,000

SMC, Samsung Medical Center; KUGH, Korea University Guro Hospital; UCLA, University of California Los Angeles Medical Center.